



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,797	02/25/2002	Masahiro Sawada	9683/106	2048

757 7590 11/16/2006  
BRINKS HOFER GILSON & LIONE  
P.O. BOX 10395  
CHICAGO, IL 60610

EXAMINER

DESIR, PIERRE LOUIS

ART UNIT PAPER NUMBER

2617

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/082,797

Applicant(s)

SAWADA ET AL.

Examiner

Pierre-Louis Desir

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-37 and 39-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-37 and 39-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>06/16/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 22-37, and 39-48 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

2. Claim 42 is objected to because of the following informalities: "an communication" should be "a communication." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 43-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Kauser et al. (Kauser), U.S. Patent No. 5724660.

Regarding claim 43, Kauser discloses a location information provider comprising a query receiver configured to receive an inquiry from a user asking a location of a mobile station (i.e., a mobile telephone user may request location information from the mobile telephone system provider) (see col. 1, lines 51-54); a paging control responsive to the inquiry to cause the mobile station to be paged and receive information of the mobile station from the mobile station (i.e., the location information could be passed to the user from the system. Thus, the mobile station is

inherently paged when receiving the location information) (see col. 1, lines 54-55, and col. 12, lines 32-35); and a transmitter configured to transmit to the user a response which comprises at least of the location information (i.e., the location information is passed (transmitted) to the user) (see col. 1, lines 54-55, and col. 12, lines 32-35).

Regarding claims 44, Kauser discloses a location information provider (see claim 43 rejection) wherein the location information comprises a geographical location of the mobile station (see col. 1, lines 15-18, 54-55, and col. 12, lines 32-35).

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 39, and 41-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Kojima.

Regarding claim 42, Kojima discloses a mobile station registrable with a wireless communication network that comprises at least one communication area (see abstract), comprising: a location signal receiver configured to receive from the wireless communication network a location signal indicative of an identification of an communication area in which the mobile station is situated and receive an identification signal from a transportation which comprises an identification of the transportation (i.e., in order to attain the object described

above, there is provided a position registration method for a cellular mobile communications system which includes a plurality of base stations which individually take charge of a plurality of service areas in a real space, a mobile station, and a switching control station for acquiring position information of the mobile station through the base stations, comprising the steps of registering an existing position of a mobile space such as an electric train or a bus in the real space into the switching control station through the base stations using a control channel, transmitting, in the mobile space, a position recognition channel which is a radio channel for confirming whether or not the mobile station is present in the mobile space, discriminating whether or not the position recognition channel is received by the mobile station in the mobile space thereby to discriminate whether or not the mobile station is in the mobile space, and updating, when the mobile station is in the mobile space, the registration position of the mobile station depending upon updating of the position registration of the mobile space) (see abstract, col. 2, lines 3-23); a first registration control responsive, absence the identification signal, to the location signal to transmit to the wireless communication network a first registration request which comprises the identification of the communication area, whereby the mobile station becomes locatable with respect to the communication area (i.e., the position registration method for a cellular mobile communications system may be constructed such that, if, when the mobile station is placed into a reception disabled state from a reception enabled state of the position recognition channel, a position registration operation is performed through the base stations over a control channel in a condition wherein no identification number of the mobile space is available, then the switching control station determines that the mobile station has gone out of the mobile space. Alternatively, the position registration method for a cellular communication

system may be constructed such that, if the identification number of the mobile space being transmitted over the position recognition channel cannot be received any more, the mobile station performs a position registration operation over the control channel between the mobile station and the pertaining base station even if the mobile station is present in the mobile space) (see col. 2, lines 35-51); and a second registration control responsive to the identification signal to disable the first registration control and transmit a second registration request which comprises the identification of the transportation, whereby the mobile station becomes locatable with respect to the transportation (i.e., the position registration method for a cellular mobile communication system may be constructed such that an identification number unique to the mobile space is transmitted over the position recognition channel in the mobile space, and the mobile station which receives the identification number transmits the identification number to the base stations over a control channel to perform a position registration operation into the switching control station, and then the switching control station collates the identification number to discriminate that the mobile station has entered the mobile space which has the pertaining identification number) (see col. 2, lines 3-34).

Regarding claim 39, Kojima discloses a mobile station (see claim 42 rejection) further comprising a positioning device that determines a travel status of the mobile station, which comprises a geographical location of the mobile station (see abstract, col. 4, lines 40-45, and col. 5, lines 3-12).

Regarding claim 41, Kojima discloses a mobile station (see claim 39 rejection) further comprising a transmitter that transmits the travel status (i.e., position information) in response to a paging signal (see abstract, and col. 4, lines 33-45).

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 22-30, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima in view of Tuohino, U.S. Patent No. 5577264.

Regarding claim 22, Kojima discloses a location management apparatus functionally located in a mobile communication network, the location management apparatus maintaining a location of a mobile station within a mobile communication network for wirelessly communicating with the mobile station (see abstract), comprising: a communication control configured to communicate with the mobile station using the mobile communication network, and receive from the mobile station an identification of a transportation on which the mobile station is carried (i.e., the position registration method for a cellular mobile communication system may be constructed such that an identification number unique to the mobile space is transmitted over the position recognition channel in the mobile space, and the mobile station which receives the identification number transmits the identification number to the base stations over a control channel to perform a position registration operation into the switching control station) (see col. 2, lines 24-34); a location information storage in which the location of the mobile station is identifiable with reference to the identification of the transportation notified by the mobile station (see fig. 5, col. 4, lines 13-30); a transportation location finder configured to

identify a communication area where the transportation is situated, based on movement information obtained from a traffic control that manages an operation of a transportation system including the transportation on which the mobile station is carried (i.e., the switching control station 7 has a function of updating, when the mobile space moves in the real space and performs a position registration operation, also the position information of the mobile station from the identification number of the mobile space, in which the mobile station is present, acquired through the base station) (see col. 4, lines 40-45, and col. 5, lines 3-12).

Although Kojima discloses an apparatus as described, Kojima does not specifically disclose an apparatus comprising a paging control configured to, when a call for the mobile station comes, access the location information storage so as to find the communication area where the transportation is situated, determined by the transportation location finder and cause a paging signal transmitted within the communication area.

However, Tuohino discloses an apparatus comprising Tuohino a paging control configured to, when a call for the mobile station comes, access the location information storage so as to find the communication area where the transportation is situated, determined by the transportation location finder and cause a paging signal transmitted within the communication area (i.e., in the call set-up, a two-stage interrogation is conducted: first, the identifier of the subsystem is obtained as the location data of the mobile station; second, the current location of the subsystem where the call will be routed to is obtained by means of the identifier of the subsystem) (see abstract, and col. 5, lines 38-62).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings as described by Kojima with the teachings of Tuohino to arrive at the claimed



invention. A motivation for doing so would have been to reduce the signaling load in a cellular radio network (see col. 2, lines 9-13).

Regarding claim 23, Kojima discloses an apparatus (see claim 22 rejection) wherein the communication area is a paging area (see col. 2, lines 3-22).

Regarding claim 24, Kojima discloses an apparatus as described above (see claim 22 rejection).

Although Kojima discloses an apparatus wherein when the mobile station is in the mobile space, the registration position of the mobile station is updated depending upon updating of the position registration of the mobile space (i.e., identification of a transportation on which the mobile station is carried) (see abstract), Kojima does not specifically disclose an apparatus wherein the location information storage is updated by a registration request from the mobile station which identifies either a communication area which the mobile station enters or a transportation on which the mobile station is carried.

However, Tuohino discloses an apparatus wherein an apparatus wherein the location information storage is updated by a registration request from the mobile station, which identifies either a communication area, which the mobile station enters, or a transportation on which the mobile station is carried (see abstract and col. 4, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Kojima with the teachings as described by Tuohino to arrive at the claimed invention. A motivation for doing so would have been to provide an accurate up-to-date location information database.

Regarding claim 25, Kojima discloses an apparatus (see claim 22 rejection) wherein the transportation location finder determines the communication area where the transportation is situated, using a geographical location of the transportation contained in the movement information (i.e., when the mobile space 9 moves into the service area 2 in the real space, although it becomes impossible to receive the control channel 15, the mobile station 27 does not perform a position registration operation but reads out the system information of the destination of the movement from the position recognition channel 25 and starts use of a new control channel 13) (see col. 6, lines 16-31).

Regarding claim 26, Kojima discloses an apparatus as described above (see claim 22 rejection).

Although Kojima discloses an apparatus as described, Kojima does not specifically disclose an apparatus wherein the transportation location finder is activated to find the communication area where the transportation is situated when a communication when a call is received for the mobile station being carried on the transportation.

However, Tuohino discloses an apparatus wherein the transportation location finder is activated to find the communication area where the transportation is situated when a communication when a call is received for the mobile station being carried on the transportation (i.e., a call to a mobile station registered in the mobile subsystem is routed as follows: the location data of the mobile station stored in the cellular radio network is interrogated, the location data being the identifier of the mobile subsystem, the location data which corresponds to the subsystem identifier and is stored in the cellular radio network is interrogated, the call is

routed to the subsystem and further to the mobile station by means of the location data of the subsystem) (see abstract, and col. 2, lines 55-67).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings as described by Kojima with the teachings of Tuohino to arrive at the claimed invention. A motivation for doing so would have been to reduce the signaling load in a cellular radio network (see col. 2, lines 9-13).

Regarding claim 27, Kojima discloses an apparatus (see claim 22 rejection) wherein the location information storage and the transportation location finder are located on different servers functionally connected to each other (see fig. 5, col. 4, lines 14-30).

Regarding claim 28, Kojima discloses an apparatus (see claim 22 rejection) wherein the location information storage comprises a first table in which the locations of the mobile stations are identified with reference to the transportation on which some of the mobile stations are being carried and communication areas where the other of the mobile stations are situated, and a second table in which locations of the transportation are identified with reference to communication areas where the transportations are situated (see fig. 5, col. 4, lines 14-30, and lines 59-62. Also refer to Tuohino col. 5, lines 1-17).

Regarding claim 29, Kojima discloses an apparatus (see claim 28 rejection) wherein the second table is updated by an update request from the transportation location finder receiving the movement information of the transportation (see col. 4, lines 40-45. Also refer to Tuohino col. 5, lines 1-17).

Regarding claim 30, Kojima discloses an apparatus as described above (see claim 22 rejection).

Although Kojima discloses an apparatus as described, Kojima does not specifically disclose an apparatus further comprising a receiver that receives travel information from the mobile station, which transmits the travel information in response to the paging signal initiated by the location management apparatus.

However, Tuohino discloses an apparatus further comprising a receiver that receives travel information from the mobile station, which transmits the travel information in response to the paging signal initiated by the location management apparatus (i.e., when a MS moves to a mobile system MCPN (located e.g. on a train), the MS effects location updating to the MCPN. The MCPN, in turn, transmits the information on the location of the MS to the fixed cellular radio network, which stores the corresponding logical location area, i.e. identification data of the MCPN, as the location data of the MS, wherein a call to a mobile station registered in the mobile subsystem is routed as follows: the location data of the mobile station stored in the cellular radio network is interrogated, the location data being the identifier of the mobile subsystem, the location data which corresponds to the subsystem identifier and is stored in the cellular radio network is interrogated, the call is routed to the subsystem and further to the mobile station by means of the location data of the subsystem) (see abstract, col. 2, lines 55-67, and col. 5, lines 11-17).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings as described by Kojima with the teachings of Tuohino to arrive at the claimed invention. A motivation for doing so would have been to reduce the signaling load in a cellular radio network (see col. 2, lines 9-13).

Regarding claim 37, Kojima discloses an apparatus wherein a location of a mobile station stored in the location information storage is updated by a registration request from a transportation which identifies the transportation and the mobile station (i.e., when the mobile station is in the mobile space, the registration position of the mobile station is updated depending upon updating of the position registration of the mobile space) (see abstract).

9. Claims 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima and Tuohino, further in view of Jones, U.S. Patent No. 6363323.

Regarding claims 31-36, the combination discloses an apparatus (see claim 25 rejection) as described above.

Although the combination discloses an apparatus wherein travel information comprises a geographical location of the mobile station, and a traveling direction thereof (see abstract, col. 4, col. 6, lines 25-31, and lines 33-39. Also refer to Tuohino), the combination does not specifically disclose an apparatus wherein the travel information comprises a traveling speed; and further comprising transportation travel information storage accessible by the transportation location finder, which maintains geographical locations of the transportations (as related to claim 32); wherein the transportation travel information storage stores travel statuses of the transportations, wherein the travel status comprises a delay in schedule (as related to claim 33); wherein the travel status of the transportations are receivable by the location management apparatus (as related to claim 34); further comprising a schedule information storage that stores travel schedules of the transportations, wherein based on information stored in the transportation travel information storage and the schedule information storage, the location management apparatus

determines a future location of a transportation (as related to claim 35); and wherein the travel schedules of the transportations are receivable by the location management apparatus (as related to claim 36).

However, Jones discloses a vehicle tracking system includes a sensor (e.g., a GPS sensor) and a vehicle control unit (VCU) attached to a vehicle. The sensor determines the vehicle's location based on positioning signals received from a plurality of satellites. The VCU compares the vehicle's location to a predefined schedule. The predefined schedule includes a plurality of entries where each entry corresponds to a location along the vehicle's route of travel. Furthermore, each entry includes a location value indicating the location that corresponds with the entry and a time value indicating when the vehicle should be at the location. The VCU determines whether the vehicle is on schedule or off schedule (i.e., delay) by comparing the current location of the vehicle (as determined by the sensor) and the amount of time elapsed since the start of the route with the entries in the predefined schedule (i.e., speed information). If the vehicle is off schedule, then the VCU transmits a status message to a remote location indicating how much the vehicle is off schedule (see abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have been that accurate and updated information as related to location is provided.

10. Claims 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima in view of Jones.

Kojima discloses mobile station as described above (see claim 39 rejection).

Although Kojima discloses a mobile station wherein the travel status further comprises a traveling speed of the mobile station.

However, Jones discloses a vehicle tracking system includes a sensor (e.g., a GPS sensor) and a vehicle control unit (VCU) attached to a vehicle. The sensor determines the vehicle's location based on positioning signals received from a plurality of satellites. The VCU compares the vehicle's location to a predefined schedule. The predefined schedule includes a plurality of entries where each entry corresponds to a location along the vehicle's route of travel. Furthermore, each entry includes a location value indicating the location that corresponds with the entry and a time value indicating when the vehicle should be at the location. The VCU determines whether the vehicle is on schedule or off schedule (i.e., delay) by comparing the current location of the vehicle (as determined by the sensor) and the amount of time elapsed since the start of the route with the entries in the predefined schedule (i.e., speed information). If the vehicle is off schedule, then the VCU transmits a status message to a remote location indicating how much the vehicle is off schedule (see abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have been that accurate and updated information as related to location is provided.

11. Claims 45, 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kauser in view of Kojima and Jones.

Regarding claim 45, Kauser discloses a location provider as described (see claim 43 rejection).

Although Kauser discloses a location information provider as described, Kauser does not specifically disclose a provider wherein the location information comprises a direction in which the mobile station is moving and a speed at which the mobile station is moving.

However, Kojima discloses an apparatus wherein a mobile station is present in a train or a bus and moves together with the mobile space (see abstract). Thus, as the train or the bus moves, the mobile station also moves. And the direction and speed of the vehicle (train or bus) would also be the direction or speed of the mobile station.

Jones discloses a vehicle tracking system includes a sensor (e.g., a GPS sensor) and a vehicle control unit (VCU) attached to a vehicle. The sensor determines the vehicle's location based on positioning signals received from a plurality of satellites. The VCU compares the vehicle's location to a predefined schedule. The predefined schedule includes a plurality of entries where each entry corresponds to a location along the vehicle's route of travel. Furthermore, each entry includes a location value indicating the location that corresponds with the entry and a time value indicating when the vehicle should be at the location. The VCU determines whether the vehicle is on schedule or off schedule by comparing the current location of the vehicle (as determined by the sensor) and the amount of time elapsed since the start of the route with the entries in the predefined schedule (i.e., speed information). If the vehicle is off schedule, then the VCU transmits a status message to a remote location indicating how much the vehicle is off schedule (see abstract).



Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have been that accurate and updated information as related to location is provided.

Regarding claim 47, Kauser discloses a location information provider comprising: a query receiver configured to receive an inquiry from a user asking a location of a mobile station (i.e., a mobile telephone user may request location information from the mobile telephone system provider) (see col. 1, lines 51-54).

Although Kauser discloses a provider comprising transmitting to the user a response (i.e., the location information is passed (transmitted) to the user) (see col. 1, lines 54-55, and col. 12, lines 32-35), Kauser does not specifically disclose a provider comprising a memory that stores time schedules of transportations; a location queryer responsive to the inquiry to find if the mobile station is situated on a transportation; and location estimator configured to determine, if the mobile station is situated on a transportation, a future location of the mobile station by referring to the time schedules stored in the memory; and a response which comprises the determined future location of the mobile station.

However, Kojima discloses an apparatus comprises an indication as to whether or not a mobile station is situated on a transportation (see fig. 5, col. 4, lines 13-30)

Jones discloses a vehicle tracking system includes a sensor (e.g., a GPS sensor) and a vehicle control unit (VCU) attached to a vehicle. The sensor determines the vehicle's location based on positioning signals received from a plurality of satellites. The VCU compares the vehicle's location to a predefined schedule. The predefined schedule includes a plurality of

entries where each entry corresponds to a location along the vehicle's route of travel.

Furthermore, each entry includes a location value indicating the location that corresponds with the entry and a time value indicating when the vehicle should be at the location. The VCU determines whether the vehicle is on schedule or off schedule by comparing the current location of the vehicle (as determined by the sensor) and the amount of time elapsed since the start of the route with the entries in the predefined schedule (i.e., speed information). If the vehicle is off schedule, then the VCU transmits a status message to a remote location indicating how much the vehicle is off schedule (see abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have been that accurate and updated information as related to location is provided.

Regarding claim 48, Kojima discloses a location information provider (see claim 47 rejection) wherein the location queryer also finds, if the mobile station is situated on a transportation, a current location of the transportation and an identification of the transportation, and the response comprises the current location of the transportation and the identification of the transportation (see abstract, fig. 5, col. 4, lines 13-30).

12. Claims 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kauser in view of Kojima.

Kauser discloses a provider as described above (see claim 43 rejection).

Although Kauser discloses a provider as described, Kauser does not specifically disclose a provider wherein the response comprises an indication as to whether or not the mobile station is situated on a transportation.

However, Kojima discloses an apparatus wherein a response comprises an indication as to whether or not a mobile station is situated on a transportation (see fig. 5, col. 4, lines 13-30).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings as described by Kojima with the teachings of Tuohino to arrive at the claimed invention. A motivation for doing so would have been to reduce the signaling load in a cellular radio network (see col. 2, lines 9-13).

### ***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is (571) 272-7799. The examiner can normally be reached on Monday-Friday 8:00AM- 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Pierre-Louis Desir  
11/10/2006

**JEAN GELIN**  
**PRIMARY EXAMINER**

